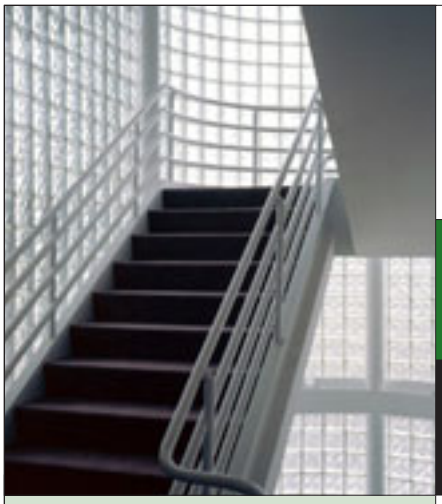

Get to know the *i-codes*

This is the eleventh in a series of flyers exploring the differences between the Uniform and International Codes (I-Codes). Topics covered include means of egress, building uses, heights and areas, types of construction, fire-resistance-rated assemblies, accessibility, structural provisions, sprinklers, existing buildings, and the residential and mechanical codes. Additional topics may be added as needed.

Seismic Provisions

About the Codes

The 2003 editions of the International Building, Residential, Mechanical and Fire Codes (I-Codes) replaced the Uniform Codes in Seattle on Aug. 15, 2004*.

Copies can be purchased from the Public Resource Center (PRC), 20th floor, Seattle Municipal Tower, 700 Fifth Ave., (206) 684-8467, or:

- WA Assn. of Building Officials (360) 586-6725, *www.wabo.org*
- International Code Council (ICC) (800) 284-4406, *www.iccsafe.org*

— *I-Codes Training*

I-Code trainings are offered by the following organizations:

- WA Assn. of Building Officials (360) 586-6725, *www.wabo.org*
- International Code Council (800) 284-4406, *www.iccsafe.org*
- American Inst. of Architects-Seattle, (206) 448-4938 *www.aiaseattle.org*
- Structural Engineers Assn. of WA (206) 682-6026, *www.seaw.org*
- Building Industry Assn. of WA (360) 352-7800, *www.biaw.com*
- Master Builders Assn. of King & Snohomish Counties (425) 451-7920, *www.mba-ks.com*

— *Technical Code Support*

- Building Code (206) 684-4630 Hours: M-F, 1 p.m.-4:15 p.m.
- Electrical Code (206) 684-5383 Hours: M/W/F, 7:30 a.m.-5:30 p.m. Tu/Th, 10:30 a.m.-5:30 p.m.
- Energy/Mechanical Code (206) 684-7846 Hours: M-F, 1 p.m.-4:15 p.m.

Changes in the Building Code's Seismic Provisions

Significant changes to seismic design of buildings in the 2003 SBC come from the national standards produced by the National Earthquake Hazards Reduction Program (NEHRP). The current edition of NEHRP uses a longer return period for the design earthquake, which means buildings must be designed to a stronger earthquake.

The 2003 SBC seismic provisions require ground motions on the site to be evaluated based on Earthquake Hazard Maps published by the U.S. Geological Survey (USGS); the ground motions are translated into a design force level. Buildings then are classified into a Seismic Design Category (SDC) with specific detailing requirements. All buildings in Seattle fall into SDC "D."

In addition to the changes to the design earthquake, designers should be also aware of the following seismic provisions in 2003 SBC:

- Designers must use ASCE 7-02 for all seismic design along with the 2003 SBC, including simplified design. (ASCE 7 is published by the American Society of Civil Engineers.)
- SBC Section 1603.1.5 requires the designer to provide certain seismic information on the drawings regardless of whether or not seismic forces govern the lateral design.
- The load combinations of SBC Section 1605 have been revised for Load and Resistance Factor Design (LRFD) and Allowable Stress Design (ASD), with limitations on material allowable stress increases.
- Special requirements for inspection and construction quality assurance have been added to SBC Chapter 17. There are now more stringent special inspection requirements for wood framed construction. The 2003 SBC also requires a quality assurance plan to be prepared by the design professional as part of the construction documents.

Seismic provisions in the SBC are designed to prevent extensive damage during an earthquake.

Information on the design of one- and two-family buildings and townhouses can be found in the tenth flyer in this series, *Residences & the IRC*.

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Visit DPD's new Technical Codes website:
www.seattle.gov/dpd/techcodes

** NOTE: The Uniform Plumbing Code, National Electrical Code, and WA State Energy Code with Seattle amendments will continue to be enforced in Seattle and WA.* *Updated 12/14/04*